# A Management Strategy for The Eastern Coyote (*Canis latrans*) in Fundy National Park

L. Collingwood
Park Warden
Fundy National Park
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Recommended by
Larry Harbidge
Chief Park Warden

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Date

Approved by
Carol Whitfield
A/Superintendent

June 30/89
Date

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## 1.0 INTRODUCTION

This document outlines the management strategies for the coyote within Fundy National Park. The strategies emphasize providing public information on this relatively new species and were developed to provide a reasoned and planned course of action to respond to coyote/human interactions. The document responds to concerns stipulated in the Fundy National Park Management Plan, Park Conservation Plan, Canadian Parks Policy and Fundy National Park Public Safety Plan.

The objectives of this strategy paper are to:

1. Increase our data base on the population fluctuation and distribution through monitoring activities.

2. Provide information to the public on the eastern coyote in Fundy National Park.

3. Protect and maintain the eastern coyote status in their natural habitat while still providing a strategy to deal with a potential for coyote/human interaction.

## 2.0 MANAGEMENT CONCERNS

The eastern coyote has become a permanent resident in Fundy National Park. The general public are unfamiliar with the biology of the coyote and show a fear for the animal. There is evidence this species may compete with other well-established predator species such as the fox and bobcat, as well as preying heavily on the park's white-tailed deer population. Although our objective is to protect the coyote in the park, it will be managed to ensure the safety of the public.

## 3.0 COYOTE/HUMAN INTERACTION CLASSIFICATION

A wildlife/human interaction form has been developed and classifies coyote/human interactions into three(3) separate types; Potential, Pivotal and Active. The form provides information for classifying all interactions. Park Wardens will classify all interactions and identify which management strategy to implement.

Definitions of terms are provided on the form for reference when classfiying an interaction. Management strategies have been developed for each type of interaction that may occur. The form identifies the type of interaction and the type of aggression associated with each strategy.

**FIGURE I** **Wildlife/Human Interaction Form**
**Fundy National Park**

Species _____ Interaction # _____

Date _____ Occurrence # _____

Reported by _____ Time _____

Location _____

1. **Describe appearance of the animal** (colour, size, markings, young, etc.)

_____
_____ _____
_____
_____

2. **Describe actions of the animal** (check appropriate items below)

| | | | |
|---|---|---|---|
| Stationary | _____ | Fear of People: Strong | _____ |
| Running/Walking Away | _____ | Some | _____ |
| Walking Towards | _____ | Little | _____ |
| Raiding food/garbage | _____ | None | _____ |
| Comments: _____ | | Vocalization: Bark | _____ |
| _____ | | Growl | _____ |
| _____ | | None | _____ |
| _____ | | Other | _____ |
| _____ | | | _____ |

3. **Actions of the People** (check appropriate items below)

| | | | |
|---|---|---|---|
| Feeding animal | _____ | Attempted to: Chase away | _____ |
| Taking pictures | _____ | Get closer | _____ |
| Stationary | _____ | Get away | _____ |
| Hiking | _____ | Other | _____ |
| Near young | _____ | | _____ |
| Other | _____ | | _____ |

4. **Factors Attracting Animal**

| | | | |
|---|---|---|---|
| Food | _____ | Other | _____ |
| Garbage | _____ | | _____ |

**Other Comments:** _____
_____
_____
_____
_____

TO BE CLASSIFIED BY PARK WARDEN

Type of Interaction

Potential (no aggression) ____
Pivotal (slight aggression) ____
Active (moderate aggression) ____
(high aggression) ____

Classified by _____
Park Warden

ACTIVE MANAGEMENT

Strategy 1 ____
Strategy 2 ____
Strategy 3 ____
Strategy 4 ____

Comments _____

DEFINITIONS

AGGRESSION (circle appropriate phrases)

NONE (strong fear of people) - runs on sight, does not return

SLIGHT (fear of people) - runs only a short distance, will not approach, may return infrequently

MODERATE (little fear of people) - will not run on sight, keeps a safe distance away, may exhibit vocalization may cause damage to food, but only when people are not in the immediate area, may return frequently

HIGH (no fear of people) - will approach slowly, may exhibit vocalization, may cause damage to food and property while people are in the area, may cause injury to people, remains in the area

MANAGEMENT STRATEGY

| Type of Interaction | Aggression | Strategy |
|---|---|---|
| Potential | None | Strategy 1 |
| Pivotal | Slight | Strategy 2 |
| Active | Moderate | Strategy 3 |
| | High | Strategy 4 |

## 4.0 PASSIVE MANAGEMENT

### 4.1 Information Collection

Implement the following actions in 1989:
- Monitor coyote population fluctuations and distribution through conducting:
a) track transect survey - yearly (spring)
b) siren/howling survey - yearly (fall)
- Complete a wildlife card for each sighting.
- Conduct a literature review on the coyote inter-relationship with ungulates and other carnivores.
- Monitor strategies used in other parks.
- Keep in contact with local fish and game and trappers associations.
- Keep in contact with the Department of Natural Resources

### 4.2 Interpretation to the Public

Implement the following actions in 1989:

- Place an article on coyote biology in the Fundy Salt and Fir paper.
- Provide interpretive program on the coyote.
- During regular public contacts, provide information on the coyote.
- Develop an interim pamphlet on the coyote.

### 4.3 Staff Training

Providing for the safety of the general public is one of the major duties of a Park Warden and all warden staff will be trained in handling and using immobilization equipment, firearms, and live trapping equipment.

## 5.0 ACTIVE MANAGEMENT

Public safety (coyote/human interactions) will be responded to through completion of a wildlife/human interaction form (Figure I). The interactions will be classified into one of three types: Potential, Pivotal or Active. A binder will be available that will contain forms and a monitoring check list.

Identify the appropriate strategy below and adhere to the action requirement listed.

### 5.1 Strategy 1 - Potential Interaction (no aggression)

- Monitor the area by conducting morning and evening patrols of the area for a three-day period.
- Check the immediate area for natural reasons for the coyote being in the area and record on the interaction form.
- Analyze the monitoring and review the classification for accuracy.
- If three interactions are recorded within one week and informations indicate it is the same animal, reclassify the interactions to pivotal and take appropriate action.

### 5.2 Strategy 2 - Pivotal Interaction (slight aggression)

- Capture, ear tag and relocate using live trapping techniques - trained wardens only.
- Monitor the area morning and evening for coyote return and behavior during the next three days when trapping is unsuccessful.
- Inform the Chief Park Warden of the situation.
- Complete an occurrence report, referencing the wildlife form number.
- Complete the in-park coyote pamphlet if not yet complete.

### 5.3 Strategy 3 - Active Interaction (moderate aggression)

- Provide for the safety of the public on site.
- Inform the Chief Park Warden of the situation.
- Capture by live trapping.
- Destroy if animal has an ear tag.
- Destroy if unable to live trap within one day.
- Distribute the in-park coyote pamphlet to the public.

## 5.4 Strategy 4 - Active Interaction (high aggression)

- Provide for the safety of the public on site.
- Administer first aid if required.
- Call for assistance of another warden.
- If the animal is still in the immediate area, destroy it with the use of firearm - two wardens will be present.
- Inform the Chief Park warden of the incident.
- Conduct a search for the animal, with assistance, if it is not at the scene and the public safety concern has been dealt with. A bait station may be required.
- Complete an occurrence report.
- If injury to people occurred and the animal was not located, the area will remain closed until the Chief Park Warden recommends to the Superintendent that the area be re-opened.

## 6.0 CONCLUSION

Measures taken to deal with coyote/human interactions should be properly recorded, completed and analyzed, using the form contained in Figure I and the occurrence report form. The information should be reviewed yearly in order to assess its merits and identify the need for additional information or a change in a strategy.

The following are recommended drugs and dosages for immobilization of coyotes:

(a) If rushed - Xylazine (Rompum) - 2.0 mg/kg

(b) If time available - Xylazine (Rompum) - 1.0 mg/kg
+ Ketamine - 10.0 mg/kg